REMARKS/ARGUMENTS

This Amendment is in response to the Office Action mailed January 13, 2004. In the Office Action, claims 3, 5, 10, 12, 15 and 21-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Emerson (U.S. Patent No. 6,664,969) in view of Gupta (U.S. Patent No. 5,113,180). In addition, the Office Action identifies additional rejections directed to the remaining dependent claims. These rejections include the following: [1] claims 4, 11, 18, and 23-24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Emerson in view of Gupta and Broemmelsiek (U.S. Patent No. 5,574,836); [2] claims 6, 13 and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Emerson in view of Gupta and Forkey (U.S. Patent No. 5,733,246); and [3] claims 7, 14 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Emerson in view of Gupta and Drewry (U.S. Patent No.5,748,178). Applicants respectfully traverse the rejection in its entirety. Since the grounds for rejection of independent claims 3, 10 and 15 are carried through to the rejections noted as rejections [1-3], the argument shall focus on the allowability of claims 3, 10 and 15, which would warrant allowance of claims 4, 6-7, 11, 13-14, 18 and 20.

As the Examiner is aware, Emerson describes dividing a frame buffer into a number of blocks, each block having a signature based on its contents. *See column 2, lines 28-29 of Emerson*. The signature may be a hash code or unique number mathematically calculated by performing a hashing algorithm, such as a 16-bit cyclic redundancy check or other algorithm resulting in a unique number. *See column 7, lines 39-42 of Emerson*. As the blocks are periodically read, they undergo a hash operation to produce a new signature, which is compared to the current signature. *See column 2, lines 29-32 of Emerson*. If these signatures differ, the block has been changed and is transmitted to a remote console via a communications link. *See column 2, lines 32-34 of Emerson*.

Gupta describes an "access bit" (bit 13), which is asserted when a page has been accessed since the bit was previously reset. *See column 9, lines 42-44 of Gupta*. The access bit provides information to determine which pages have recently been accessed. *See column 9, lines 44-46 of Gupta*. This information is particularly useful for a page replacement algorithm where the last recently accessed page is transferred out of physical memory to make way for a needed page. *See column 9, lines 46-50 of Gupta*.

Neither Emerson nor Gupta, alone or in combination, suggest each limitation set forth in claims 3, 10 and 15. For instance, Emerson describes dividing a frame buffer into a number of blocks, but there is no teaching or suggestion that these blocks are memory pages corresponding to regions of an image frame that have been updated. Such limitations are present in claims 3, 10 and 15. Moreover, even though Gupta describes the access bit that provides information to determine which pages have recently been accessed, it fails to describe or suggest sending only *marked pages to the display to refresh the display*. Emphasis added. In fact, Gupta teaches away from the invention because the marking of the pages, apparently considered by the Examiner to be equivalent to the setting of the access bit for the pages (which Applicants traverse), are not sent or are not even processed. Instead, those pages that are not marked are processed.

Based on the foregoing, claims 3, 10 and 15 and those claims dependent thereon are in condition for allowance. Moreover, none of the additional §103(a) rejections directed to claims 4, 6-7, 11, 13-14, 18 and 20 should be maintained since the grounds for rejection of claims 3, 10 and 15 were relied on to support the rejection of these claims.

Conclusion

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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